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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,146	01/28/2004	Guerino G. Sacripante	118411	9731

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EXAMINER	
MCCULLEY, MEGAN CASSANDRA	
ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
01/07/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27074@oliff.com
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Office Action Summary	Application No.	Applicant(s)	
	10/765,146	SACRIPANTE ET AL.	
	Examiner	Art Unit	
	Megan McCulley	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/19/2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-7,10,11,13-21,23-31 and 34-44* is/are pending in the application.

4a) Of the above claim(s) *17-20 and 24-29* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3, 5-7, 10, 11, 13-16, 21, 23, 30, 31, 34-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Note

The status modifier of claim 6 is incorrect: it should be "currently amended" instead of "original."

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 39 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure in the specification that the process can further comprise freezing the aggregation of the particles in the dispersion by pH adjustment once at a desired aggregated particle size.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 41 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims do not follow the proper structure of a Markush group, namely, selected from the group consisting of A, B and C. There are many "ands" in the claims, so it is unclear where the choice of aggregating agents stops.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 5-7, 21, 30, 31, 34-39, 41, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. (U.S. Pat. 6,210,853) in view of Wang et al. (US 2002/0107306)

Regarding claims 1 and 3: Patel et al. teaches an emulsion process (abstract) for forming a curable powder/toner comprising in an aqueous dispersion/latex, mixing resin particles and a coagulant/aggregating agent (abstract), aggregating particles by heating at a temperature below the Tg of the resin (abstract), coalescing by heating at a temperature above the Tg of the resin (abstract), and removing/isolating the particles/toner (abstract).

Patel et al. does not teach the resin is the elected epoxy or the curing agent is the elected polyfunctional amine, nor a curing agent is added after coalescing. However, Wang et al. teaches making epoxy particles in an aqueous dispersion (abstract) with an amino functional groups on a reactive cross linker (para. 22) added after coalescing (para. 41 and 53). Patel et al. and Wang et al. are analogous art since they are both concerned with the same field of endeavor, namely making resin particles

with aggregation agents in aqueous dispersions. At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the epoxy-amine system of Wang et al. with the process of Patel et al. and would have been motivated to do so since it makes protective powder coatings that resist stains (Wang et al. para. 8). At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the addition of the curing agent as in Wang et al. and would have been motivated to do so in order to have a curable powder coating.

Regarding claims 5 and 6: Patel et al. teaches mixing with a colorant such as a pigment (col. 1 lines 45-49) before the aggregation step (abstract).

Regarding claim 7: The result of isolating the particles/toner of Patel et al. is a curable powder.

Regarding claim 21: Patel et al. teaches a polyester resin (col. 1 lines 45-49) while the combination above lays out motivation for including the elected epoxy resin.

Regarding claim 30: Patel et al. teach dry blending with an additive (col. 8 lines 1-5).

Regarding claim 31: Patel et al. teach dry blending additives such as charge control additives (col. 9 lines 1-5).

Regarding claim 34: Patel et al. teach resin in an amount of 40-90 % (col. 11 lines 15-25).

Regarding claim 35: Patel et al. teach the colorant in an amount of 2-12 % (col. 12 lines 20-30).

Regarding claim 36: Patel et al. teaches a geometric size distribution, GSD, from 1.15-1.24 (col. 4 line 63), which overlaps the claimed range.

Regarding claim 37: Patel et al. teaches a styrene-acrylate resin/poly(styrene-acrylate) (col. 6 line 26).

Regarding claim 38: Patel et al. teach cyan, magenta and yellow pigments (col. 11 line 54).

Regarding claim 39: Patel et al. teaches adjusting the pH after aggregation (abstract), which would freeze at the desired aggregated particle size.

Regarding claims 41 and 43: Patel et al. teaches the coagulant/aggregating agent can be polyaluminum chloride (col. 12 lines 50-55).

Claims 10, 11, 13-16, 23, 40, 42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al. (U.S. Pat. 6,210,853) in view of Wang et al. (US 2002/0107306)

Regarding claims 10 and 11: Patel et al. teaches an emulsion process (abstract) for forming a curable powder/toner comprising in an aqueous dispersion/latex, mixing resin particles and a coagulant/aggregating agent (abstract), aggregating particles by heating at a temperature below the Tg of the resin (abstract), coalescing by heating at a temperature above the Tg of the resin (abstract), and removing/isolating the particles/toner (abstract).

Patel et al. does not teach the resin is the elected epoxy or the curing agent is the elected polyfunctional amine, nor a curing agent is added to the dispersion.

However, Wang et al. teaches making epoxy particles in an aqueous dispersion (abstract) with amino functional groups on a reactive cross linker (para. 22) added during the dispersion (para 22). At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the epoxy-amine system of Wang et al. with the process of Patel et al. and would have been motivated to do so since it makes protective powder coatings that resist stains (Wang et al. para. 8). At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the addition of the curing agent as in Wang et al. and would have been motivated to do so in order to have a curable powder coating.

Regarding claims 13 and 14: Patel et al. teaches mixing with a colorant such as a pigment (col. 1 lines 45-49) before the aggregation step (abstract).

Regarding claim 15: The result of isolating the particles/toner of Patel et al. is a curable powder.

Regarding claim 16: Patel et al. teach the particles obtained have a volume average diameter of 3-10 microns (col. 6 lines 65-67).

Regarding claim 23: Patel et al. teaches a polyester resin (col. 1 lines 45-49) while the combination above lays out motivation for including the elected epoxy resin.

Regarding claim 40: Patel et al. teaches adjusting the pH after aggregation (abstract), which would freeze at the desired aggregated particle size.

Regarding claims 42 and 44: Patel et al. teaches the coagulant/aggregating agent can be polyaluminum chloride (col. 12 lines 50-55).

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 5-7, 10, 11, 13-16, 21, 23, 30, 31, 34-44 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan McCulley whose telephone number is (571)270-3292. The examiner can normally be reached on Monday - Thursday 7:30-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/M. M./
Examiner, Art Unit 1796